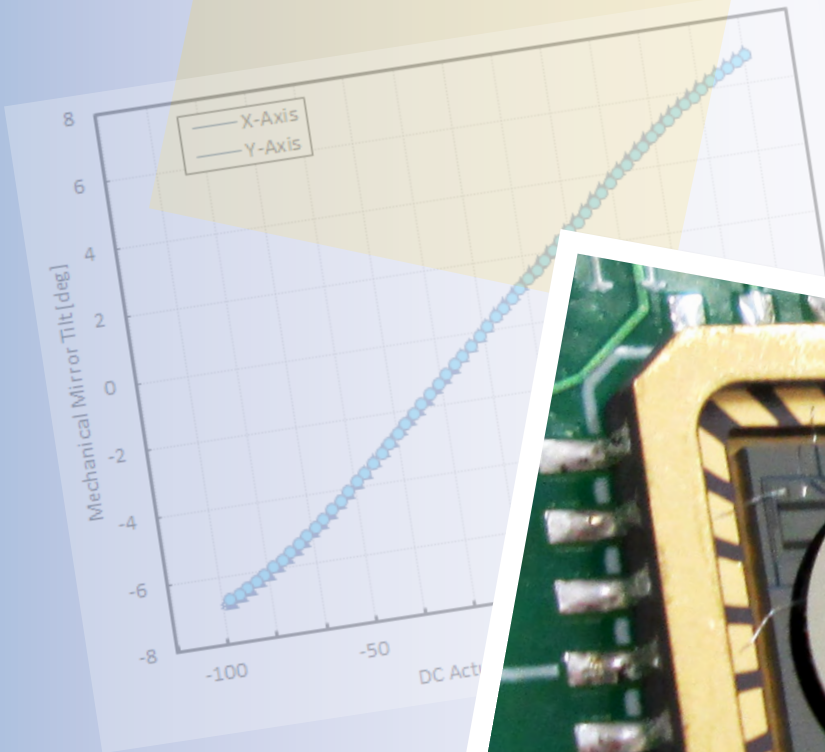




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S40681



Device Parameters Summary

Device ID : S40681

Actuator Type: A8L2.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Bonded mirror of 4.2mm diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 5.1984

Maximum Mech. Angle - Y Axis [degrees] : 5.2577

Maximum Vdifference - X Axis [V] : 165

Maximum Vdifference - Y Axis [V] : 164

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 6.4995

Resonant Frequency - X Axis [Hz] : 427

Resonant Frequency - Y Axis [Hz] : 427

Quality Factor - X Axis : 21

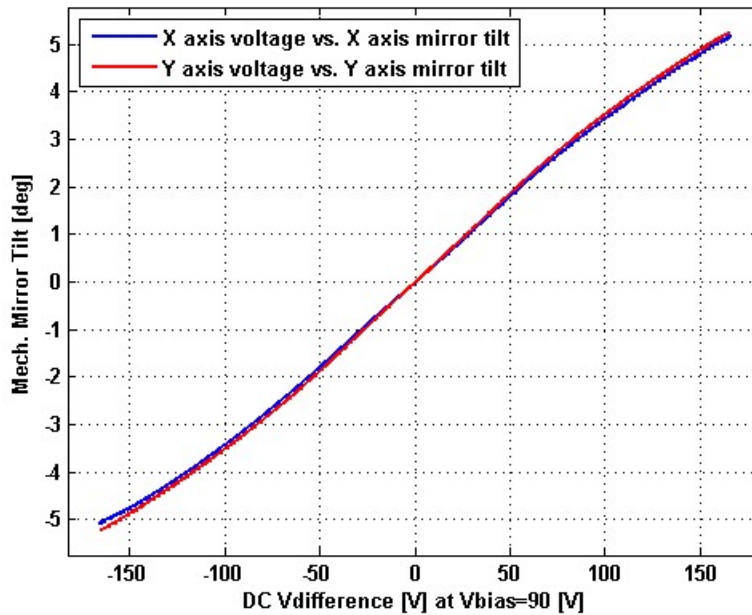
Quality Factor - Y Axis : 19

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 160

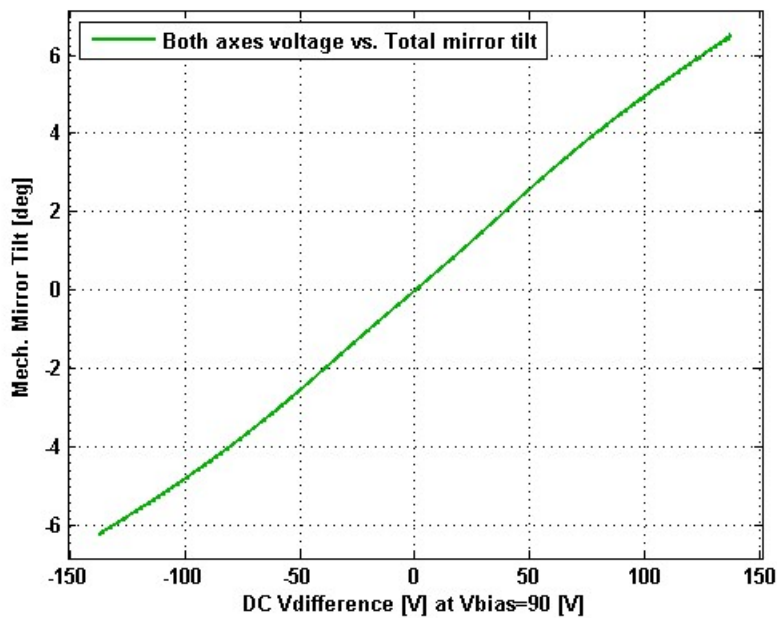
Date and Time Report was Created: 29-Jan-2018 at 14:33:40

Static Response

Voltage vs. Mech. Angle - Individual Axes

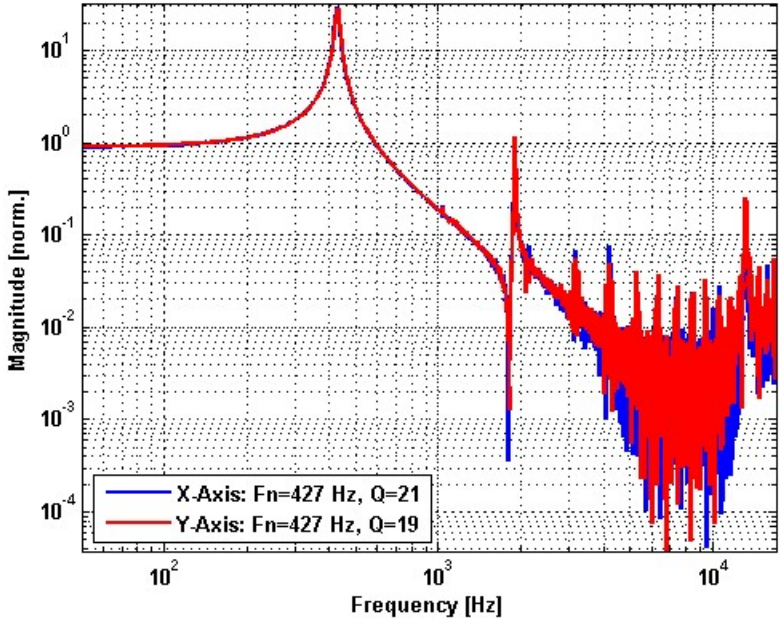


Voltage vs. Mech. Angle - Coupled Axes

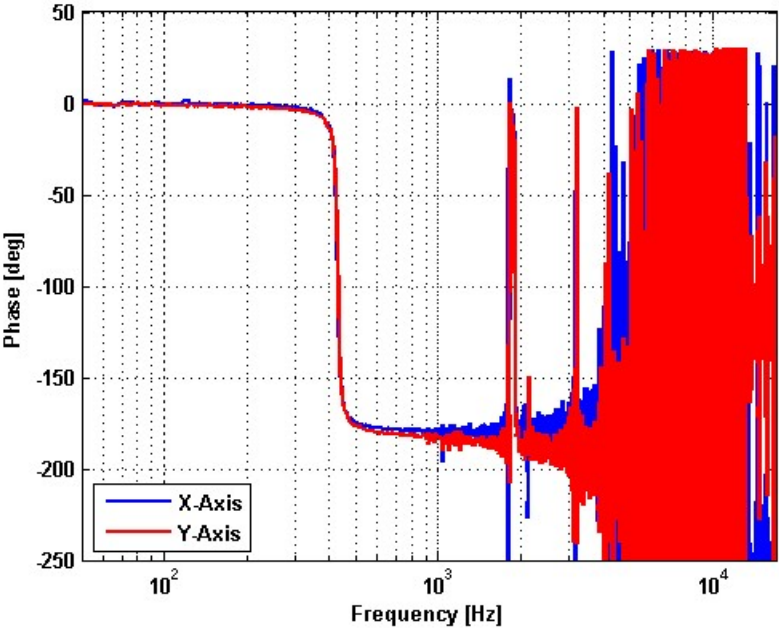


Frequency Response

Small Signal Frequency Response - Magnitude

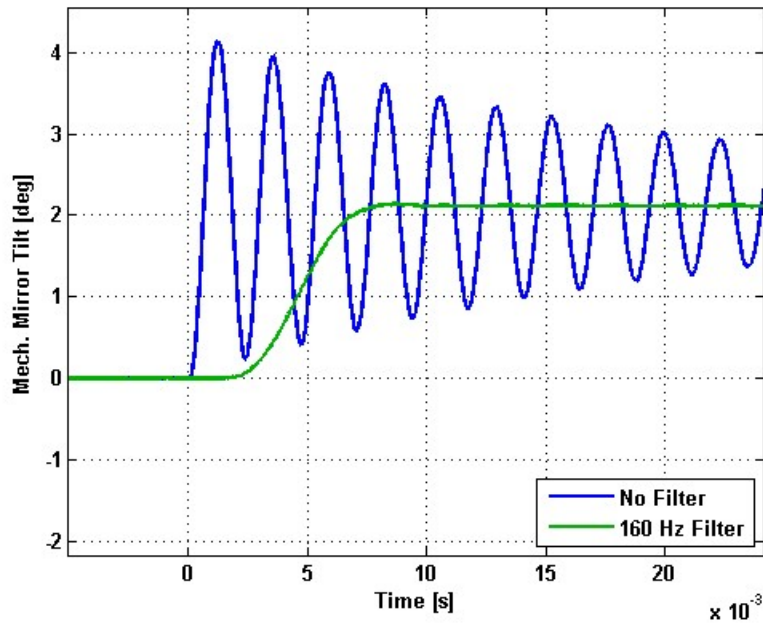


Small Signal Frequency Response - Phase

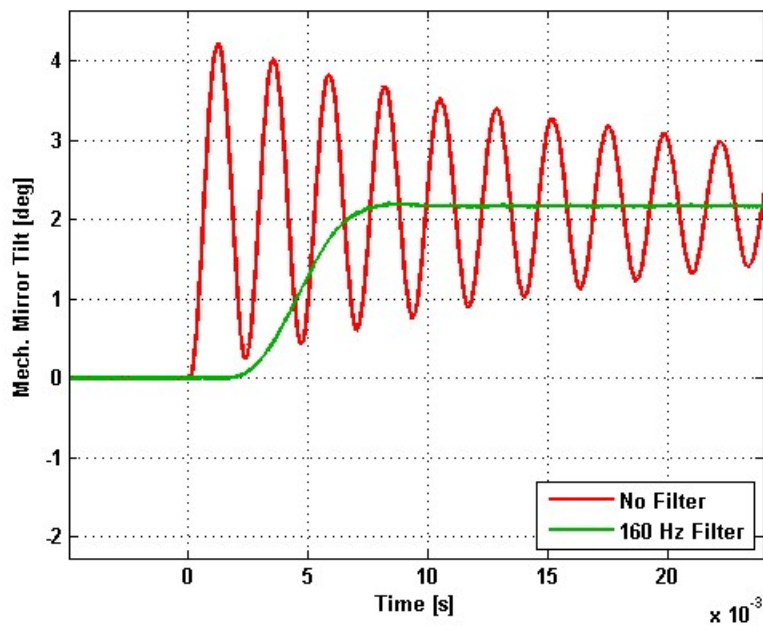


Step Response

X-Axis Step Response

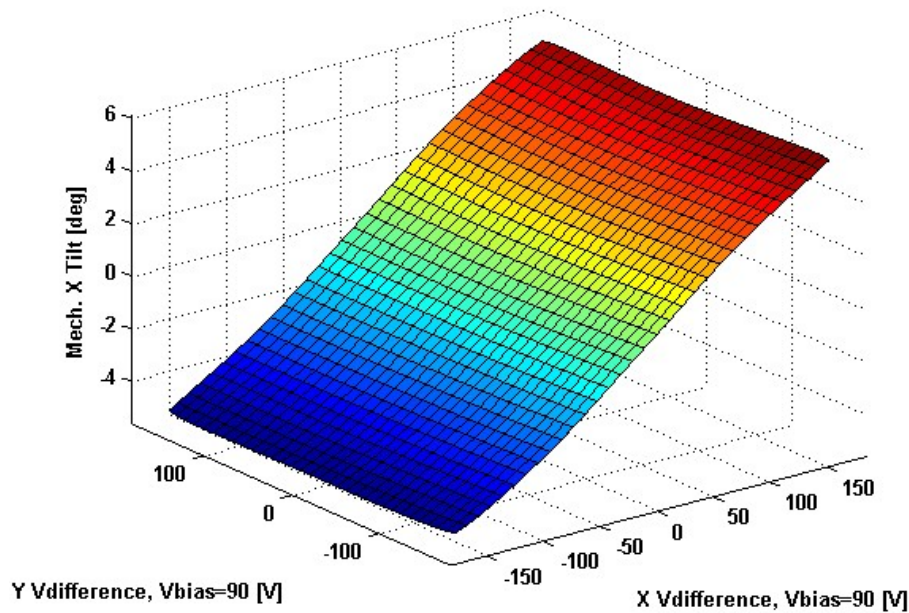


Y-Axis Step Response

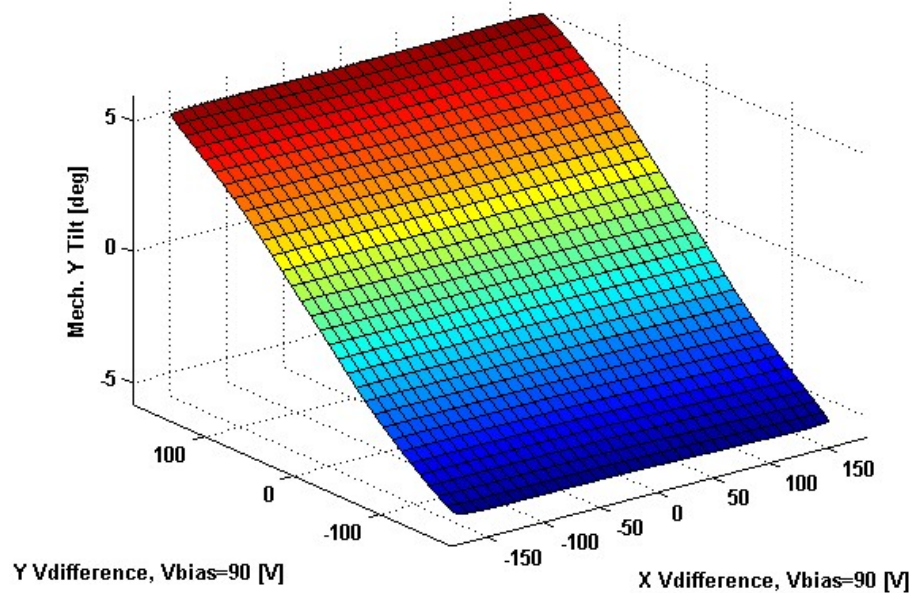


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

